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Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/698,811			
Filing Date	October 30, 2003			
First Named Inventor	Sumit Roy et al			
Art Unit	2131			
Examiner Name				
Attorney Docket Number	200313238-1			

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f Incom)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
CJ	 	US- 2003/0046420	03/06/2003	Breiter et al	
CJ		^{US-} 2002/0156833	10/24/2002	Maurya et al	
CJ		us- 2002/0133597	09/19/2002	Jhingan et al	
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Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Τ	
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FORM PTO-1449
LET OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

ATTY. DOCKET NO.

200313238-1

APPLICATION NO.

CONFIRMATION NO.

10/698,811

APPLICANT

Sumit ROY, et al.

FILING DATE

GROUP

(Use several sheets if necessary)

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

10/30/03

XAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appea
CJ	1A	6,516,350	Feb. 4, 2003	Lumelsky, et al.	
CJ	18	6,442,165	Aug. 27, 2002	Sitaraman, et al.	
CJ	1C	5,937,388	Aug. 10, 1999	Davis, et al.	
CJ	1D	6,055,433	Apr. 25, 2000	Yuan, et al.	
CJ	1E	6,463,454	Oct. 8, 2002	Lumelsky, et al.	
CJ	1F	2003/0046396	Mar. 6, 2003	Richter, et al.	
CJ	1G	2002/0152305	Oct. 17, 2002	Jackson, et al.	
	1H				
	1 I				
	13				
	1K				

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
CJ ·	1L	EP1035718A1	13/09/2000	Lucent technologies		
CJ⁺	1M	WO02/058396	25/07/2002	Streamworks Tech		1
	1N					
	10					
	1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

		OTTER TELETICES (BICIDENIS AND	ion, ride, bate, retainent rages, eac.,	
CJ *	1Q	"INTERNET STREAMING MEDIA ALLIANCE IMPLEMENTATION SPECIFICATION", Version1.0; August 28, 2001; Internet Streaming Media Alliance (ISMA); 68 pages.		
CJ -	1R	M. Handley, et al.; "SDP: SESSION DESC (1998); April 1998; 40 Pages.	RIPTION PROTOCOL"; copyright: The Internet Society	
CJ ,	15	Don Box, et al.; "SIMPLE OBJECT ACCESS PROTOCOL (SOAP) 1.1"; May 8, 2000; W3C; 35 pages.		
EXAMIN	IER	/Carlton Johnson/	DATE CONSIDERED 02/12/2007	

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LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION	NO.
200313238-1	10/698,811		
APPLICANT			
Sumit ROY, et al.			
FILING DATE	GROUP		
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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

XAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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FOREIGN PATENT DOCUMENTS

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11	М				
11	N				
10	5				
11	•				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

CJ ,	1Q	H. Schilzrinne, et al.; "REAL TIME STREAMING PROTOCOL (RTSP)"; copyright: The Internet Society (1998); April 1998; 87 pages.				
CJ %	1R	H. Schilzrinne, et al.; "RTP: A TRANSPOR 70 Pages.	T PROTOCOL FOR REAL-TIME APPLICATIONS";			
CJ 1	15	A. Babir, et al.; "OPES USE CASES AND DEPLOYMENT SCENARIOS draft-ietf-opes-scenarios-01" copyright: The Internet Society (2002); August 5, 2002; 16 pages.				
EXAMINER /Carlton Johnson/		/Carlton Johnson/	DATE CONSIDERED 02/12/2007			

PLICATION

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60 RM PTO-1449	ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION	NO.
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APPLICANT'S INFORMATION DISCLOSURE STATEMENT	Sumit ROY, et al.			
	FILING DATE	GROUP		
(Use several sheets if necessary)	10/30/03			

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

XAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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FOREIGN PATENT DOCUMENTS

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1L					
1M					
. 1N					
10					
1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

CJ ,	1Q	Takeshi Yoshimura, et al.; "MOBILE STRE, May 7-11, 2002; Honalulu, Hawaii; page:	AMING MEDIA CDN ENABLED BY DYNAMIC SMIL"; ; 651-661.
CJ -	1R	Susie J. Wee, et al.; "FIELD-TO-FRAME TODOWNSAMPLING"; IEEE International con 1999; 5 pages.	RANSCODING WITH SPATIAL AND TEMPORAL ference on Image Processing, Kobe, Japan, October
CJ	15	Sumit Roy, et al.; "APPLICATION LEVEL F TRANSCODING SESSIONS"; NOSSDAV 2	AND-OFF SUPPORT FOR MOBILE MEDIA 002, May 12-14, 2002, Miami, Florida; 10 pages.
EXAMIN	ER	/Carlton Johnson/	DATE CONSIDERED 02/12/2007

Sheet 1 of 1

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ATTY, DOCKET NO.	APPLICATION NO.	CONFIRMATION	NO.
200313238-1	10/698,811		
APPLICANT			
Sumit ROY, et al.			
FILING DATE	GROUP		
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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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11.					
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1N	1			,	
10					
1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

CJ.	1Q	Sumit Roy, et al.; "IMPLEMENTATION TRANSCODING OF COMPRESSED VII Palo Alto, CA; 8 pages.	OF AN ALGORITHM FOR FAST DOWN-SCALE DEO ON THE ITANIUM"; Hewlett- Packard Laboratories,
CJ (1R	3GPP TS 26.244 V0.1.2 (2003-02-19 Group Services and System Aspects T (PSS); 3GPP file format (3GP) (Release); 3rd Generation Partnership Project: Technical Specification ransparent end-to-end packet switched streaming service e 6).
CJ •	15	3GPP TS 26.234 V5.0.0 (2000-03); 3 Group Services and System Aspects; (PSS); Protocols and codecs (Release	rd Generation Partnership Project: Technical Specification Transparent end-to-end packet switched streaming service 5).
EXAM	INER	/Carlton Johnson/	DATE CONSIDERED 02/12/2007

Sheet 1 of 1

BT OF PATENTS AND PUBLICATIONS FOR PPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION	NO.
200313238-1	10/698,811		
APPLICANT			
Sumit ROY, et al.			
FILING DATE	GROUP		
10/30/03			

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS REFERENCE DESIGNATION

XAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appea
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FOREIGN PATENT DOCUMENTS

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

CJ ,	1Q	A. Babir, et al.; "AN ARCHITECTURE FOR OPEN PLUGGABLE EDGE SERVICES (OPES) draft -letf-opes-architecture-04"; copyright: The Internet Society (2002); December 11, 2002; 22 pages.			
CJ	1R	Wei Tsang Ooi, et al.; "DESIGN AND IMPL GATEWAYS"; Department of Computer So	EMENTATION OF PROGRAMMABLE MEDIA ience, Cornell University, Ithaca, NY; 8 pages.		
ĆĴ	15	Wei-Ying Ma, et al.; "CONTENT SERVICES 9 Pages.	NETWORK: THE ARCHITECTURE AND PROTOCOLS";		
EXAMINER		/Carlton Johnson/	DATE CONSIDERED 02/12/2007		

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200313238-1	10/698,811		
APPLICANT			
Sumit ROY, et al.			
FILING DATE	GROUP		
10/30/03			

(Use several sheets if necessary)

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

XAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
1	L				
1	м				
1	N				
1	0				
1	Р	T			

	OTHER REFERENCES (including Author, Tibe, Date, Pertinent Pages, etc.)				
CJ	1Q	Roger Karrer, et al.; "DYNAMIC HANDOFF OF MULTIMEDIA STREAMS"; Institute of Computer Systems, ETH Zurich; 5 pages.			
					
	1R	·			
	15				
			·		
EXAMIN	ER	/Carlton Johnson/	DATE CONSIDERED	02/12/2007	

Sheet 1 of 1

FEB 0 5.200 ATTY. DOCKET NO. APPLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT SUMMIT ROY, et al.

ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION	NO.
200313238-1	10/698,811		
APPLICANT			
Sumit ROY, et al.			
FILING DATE	GROUP		
10/30/03			

REFERENCE DESIGNATION

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(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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1M					
1N					
10				·	
1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

CJ 0	1Q	Elan Amir, et al.; "AN ACTIVE SERVICE FRAMEWORK AND ITS APPLICATION TO REAL-TIME MULTIMEDIA TRANSCODING"; available at www.net-tech.bbn.com/smtpkts/baltimore/index.html; 12 pages.				
CJ *	1R	Michael Harville, et al.; "AN ARCHITECTU SERVICES"; Hewlett-Packard Laboratories	RE FOR COMPONENTIZED, Palo Alto, CA; 7 pages.	, NETWORK-BASED MEDIA		
CJ	15	Michael Harville, et al.; "AN ARCHITECTURE FOR COMPONENTIZED, NETWORK-BASED MEDIA SERVICES" Streaming Media Systems Group, HP Labs, Palo Alto, CA; 4 pages.				
EXAMINER		/Carlton Johnson/	DATE CONSIDERED	02/12/2007		

Figure 1 shows the functional components of a PSS client. Figure 2 gives an overview of the protocol stack used in a PSS client and also shows a more detailed view of the packet based network interface. The functional components can be divided into control, scene description, media codecs and the transport of media and control data.

The control related elements are session establishment, capability exchange and session control (see clause 5).

- Session establishment refers to methods to invoke a PSS session from a browser or directly by entering an URL in the terminal's user interface.
- Capability exchange enables choice or adaptation of media streams depending on different terminal capabilities.
- Session control deals with the set-up of the individual media streams between a PSS client and one or several PSS servers. It also enables control of the individual media streams by the user. It may involve VCR-like presentation control functions like start, pause, fast forward and stop of a media presentation.

The scene description consists of spatial layout and a description of the temporal relation between different media that is included in the media presentation. The first gives the layout of different media components on the screen and the latter controls the synchronisation of the different media (see clause 8).

The PSS includes media codecs for video, still images, vector graphics, bitmap graphics, text, timed text, natural and synthetic audio, and speech (see clause 7).

Transport of media and control data consists of the encapsulation of the coded media and control data in a transport protocol (see clause 6). This is shown in figure 1 as the "packet based network interface" and displayed in more detail in the protocol stack of figure 2.

Video Audio Speech	Capability exchange Scene description Presentation description Still images Bitmap graphics Vector graphics Text Timed text Synthetic audio	Capability exchange Presentation description					
Payload formats	нттр						
RTP							
UDP	ТСР		UDP				
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Figure 2: Overview of the protocol stack

5 Protocols

5.1 Session establishment

Session establishment refers to the method by which a PSS client obtains the initial session description. The initial session description can e.g. be a presentation description, a scene description or just an URL to the content.

A PSS client shall support initial session descriptions specified in one of the following formats: SMIL, SDP, or plain RTSP URL.